

# Electronic Filing System (EFS) Data Electronic Patent Application Submission USPTO Use Only

EFS ID:

57196

Application ID:

10686486

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COPPER METALLIZATION WITH

Title of Invention:

THE CAPABILITY OF IN-SITU

THE DAMAL AND EALING

APPARATUS FOR ELECTRO
CHEMICAL DEPOSITION OF

THERMAL ANNEALING

First Named Inventor:

**ROBIN CHEUNG** 

Domestic/Foreign Application:

**Domestic Application** 

Filing Date:

2003-10-15

Effective Receipt Date:

2004-03-16

Submission Type:

Information Disclosure

Statement

Filing Type:

Confirmation number:

8014

Attorney Docket Number:

AMAT3421C2

Total Fees Authorized:

180.0

Payment Category:

**Deposit Account** 

**Deposit Account Number:** 

200782

Deposit Account Name:

N. ALEXANDER NOLTE

Access Code:

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**RAM Payment Status:** 

**RAM** success

RAM User ID:

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**RAM Accounting Date:** 

2004-03-16

**RAM Sequence Number:** 

17

Digital Certificate Holder: cn=N. Alexander Nolte,ou=Registered Attorneys,ou=Patent and Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US Certificate Message Digest: e94b3301e9e0ed755aee8d4d3aed3395c1a2fe3b



### **TRANSMITTAL**

Electronic Version v1.1 Stylesheet Version v1.1.0

Title of Invention APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF COPPER METALLIZATION WITH THE CAPABILITY OF IN-SITU THERMAL ANNEALING

Application Number:

10/686486

Date:

2003-10-15

First Named Applicant:

**ROBIN CHEUNG** 

Confirmation Number:

8014

Attorney Docket Number: AMAT3421C2

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Submitted by:	Elec. Sign.	Sign. Capacity	
Mr. N. ALEXANDER NOLTE Registered Number: 45689	[N. ALEXANDER NOLTE]	Attorney	

Documents being submitted

Files

us-fee-sheet

AMAT3421C2NAN2-usfees.xml

us-fee-sheet.xsl

us-fee-sheet.dtd

us-ids

AMAT3421C2NAN2-usidst.xml

us-ids.dtd

us-ids.xsl



Comments

NO FEES REQUIRED - FILED BEFORE THE FIRST OA. - IDS 3 OF 3.



### **FEE TRANSMITTAL**

Electronic Version v08 Stylesheet Version v08.0

> Title of Invention

APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF COPPER METALLIZATION WITH THE CAPABILITY OF IN-SITU THERMAL ANNEALING

Application Number:

10/686486

Date:

2003-10-15

First Named Applicant: ROBIN CHEUNG

Attorney Docket Number: AMAT3421C2

Art Unit:

1753

# **TOTAL FEE AUTHORIZED \$180**

Patent fees are subject to annual revisions on or about October 1st of each year.

#### BASIC FILING FEE

Fee Description	Fee Code	Amount \$	Fee Paid \$
Submission Of Information Disclosure Stmt Fee	1806	180	180

#### **AUTHORIZED BILLING INFORMATION**

The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit account number: 200782

Access Code

Deposit name:

MOSER PATTERSON SHERIDAN

Deposit authorized name: N. ALEXANDER NOLTE

Signature:

**\N. ALEXANDER NOLTE\** 

Date (YYYYMMDD):

2004-03-16



### FEE TRANSMITTAL

Electronic Version v08 Stylesheet Version v08.0

> Title of Invention

APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF COPPER METALLIZATION WITH THE CAPABILITY OF IN-SITU THERMAL ANNEALING

Application Number:

10/686486

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2003-10-15

First Named Applicant: ROBIN CHEUNG

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Art Unit:

1753

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Signature:

**\N. ALEXANDER NOLTE\** 

Date (YYYYMMDD):

2004-03-16



# **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18 Stylesheet Version v18.0

Title of Invention

APPARATUS FOR ELECTRO CHEMICAL DEPOSITION OF COPPER METALLIZATION WITH THE CAPABILITY OF INSITU THERMAL ANNEALING

Application Number:

10/686486

Confirmation Number: 8

8014

First Named Applicant:

**ROBIN CHEUNG** 

Attorney Docket Number: AMAT3421C2

Art Unit:

1753

Search string:

( 5252807 or 5256274 or 5259407 or 5290361 or 5292393 or 5316974 or 5324684 or 5328589 or 5349978 or 5368711 or 5377425 or 5377708 or 5415890 or 5429733 or 5442235 or 5447615 or 5449447 or 5516412 or 5527739 or 5608943 or 5625170 or 5651865 or 5677244 or 5705223 or 5716207 or 5718813 or 5723028 or 5820692 or 5884009 or 6015749 or 6071388 or 6093291 or 6136163 or 6187152 or 6203582 or 6207005 or 6258220 or 6267853 or 6276072 or 6290865

or 6290933 or 6294059 or 6309520 or

6508920 ).pn.

## **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
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	2	5256274	1993-10-26	1993-10-26 PORIS			
	3	5259407	1993-11-09	1993-11-09 TUCHIDA, ET AL.			
	4	5290361	1994-03-01	4-03-01 HAYASHIDA, ET AL.			
	5	5292393	1994-03-08	1994-03-08 MAYDAN, ET AL.			
	6	5316974	1994-05-31	1994-05-31 CRANK			
	7	5324684	1994-06-28	1994-06-28 KERMANI, ET AL.			
	8	5328589	1994-07-12	MARTIN			
	9	5349978	1994-09-27	SAGO, ET AL.			
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	10	5368711	1994-11-29	PORIS		
	11	5377425	1995-01-03	KAWAKAMI, ET AL.		
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	37	6258220	2001-07-10	DORDI, ET AL.		
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	40	6290865	2001-09-18	LLOYD, ET AL.		
	41	6290933	2001-09-18	DURGA, ET AL.		
	42	6294059	2001-09-25	HONGO, ET AL.		
	43	6309520	2001-10-30	WOODRUFF, ET AL.		
	44	6508920	2003-01-21	RITZDORF, ET AL.		

Signature

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TENTA RADENTE	Examiner Name	Date	